

AMENDMENTS

In the Claims:

1.-10. (Canceled)

11. (Previously Presented) A method of inserting an exogenous nucleic acid into the genome of a mouse or rat, said method comprising:

introducing into said mouse or rat a P-element derived vector comprising said exogenous nucleic acid under conditions sufficient for transposition to occur, wherein said P-element derived vector further comprises a pair of P-element transposase recognized insertion sequences flanking a heterologous promoter and a single transcriptionally active gene that comprises said exogenous nucleic acid, wherein said single transcriptionally active gene is separated from one of said P-element transposase recognized insertion sequences by a distance of about 1,000 bp or less, so that said exogenous nucleic acid is inserted into said genome

wherein said P-element derived vector further comprises a transposase domain, or

wherein said method further comprises introducing a second P-element derived vector comprising a transposase domain into said mouse or rat.

12. (Canceled)

13. (Previously presented) The method according to Claim 11, wherein said P-element derived vector comprises a transposase domain.

14. (Previously Presented) The method according to Claim 11 wherein said method further comprises introducing a second vector comprising a transposase domain into said mouse or rat.

15. (Previously Presented) The method according to Claim 11, wherein said exogenous nucleic acid ranges in length from about 50 to 150,000 bp.

16.-26. (Canceled)

27. (Previously Presented) A mouse or rat or cells derived from said mouse or rat that

has/have been transformed with a P-element derived vector comprising a pair of P-element transposase recognized insertion sequences flanking a heterologous promoter and a single transcriptionally active gene that comprises an exogenous nucleic acid,

wherein said single transcriptionally active gene is separated from one of said P-element transposase recognized insertion sequences by a distance of about 1,000 bp or less; and

wherein said P-element derived vector further comprises a transposase domain, or

wherein said mouse or rat or cells has/have been transformed with a second P-element derived vector comprising a transposase domain.

28.-30. (Canceled)

31. (Previously Presented) The composition of claim 27 wherein said mouse or rat or cells derived therefrom has a pair of P-element transposase recognized 31bp insertion sequences integrated into the genome of said mouse or rat or cells derived therefrom.

32.-38. (Canceled)

39. (Previously Presented) The method according to Claim 11, wherein said method is a method of inserting an exogenous nucleic acid into the genome of a mouse.

40. (Previously Presented) The method according to Claim 11, wherein said method is a method of inserting an exogenous nucleic acid into the genome of a rat.

41. (Currently Amended) A method of inserting an exogenous nucleic acid into the genome of a mouse, said method comprising:

introducing into said mouse a P-element derived vector comprising said exogenous nucleic acid under conditions sufficient for transposition to occur, wherein said P-element derived vector comprises a pair of P-element transposase recognized insertion sequences flanking ~~at least one~~ a single transcriptionally active gene that is located within 1,000 bp of one of the P-element transposase recognized sequences; and

wherein said P-element derived vector further comprises a transposase domain, or

wherein said method further comprises introducing a second P-element derived vector comprising a transposase domain into said mouse.

42. (Currently Amended) A method of inserting an exogenous nucleic acid into the genome of a mouse, said method comprising:

introducing into said mouse a P-element derived vector comprising said exogenous nucleic acid under conditions sufficient for transposition to occur, wherein said P-element derived vector comprises a pair of P-element transposase recognized insertion sequences flanking a heterologous promoter and a single transcriptionally active gene,

wherein said single transcriptionally active gene is separated from one of said P-element transposase recognized insertion sequences by a distance of about 1,000 bp or less; and

(a) wherein said P-element derived vector further comprises a transposase domain, or

(b) wherein said method further comprises:

——(i) inserting a second P-element derived vector comprising a transposase domain into the genome of said mouse; ~~or~~

——(ii) ~~inserting cells derived therefrom.~~

43. (Previously Presented) The method according to Claim 41, wherein said P-element derived vector comprises a transposase domain.

44. (Previously Presented) The method according to Claim 41 wherein said method further comprises introducing a second vector comprising a transposase domain into said mouse.